

PARUL UNIVERSITY
FACULTY OF PHYSIOTHERAPY
BPT, Supplementary Examination November 2017

Year: 2
Subject Code: 07101202
Subject Name: Electrotherapy – I and II

Date: 28-11-2017
Time: 10.00 am to 01.00 pm
Total Marks: 70

Instructions:

1. All questions are mandatory.
2. Figures to the right indicate full marks.
3. Draw Diagram wherever necessary.
4. Write sections – A, sections – B on separate answer sheets.

SECTION – A

Q.1 Discuss the Production of UV Rays. How will you treat a patient having bedsore on Sacrum? (15)

OR

Q.1 Describe Production of Ultrasound and Principles of application in Detail. (15)

Q.2 Write Short Notes (any three) (5 Marks Each) (15)

- (a) Cryotherapy- Techniques of Application
- (b) Hydro collator Packs
- (c) Production of MWD
- (d) Difference between Luminous and Non luminous IRR

Q.3 Multiple Choice Question (1 Mark Each) (05)

1. Short Wave Diathermy is used for all of following except

- | | |
|--------------------|----------------------|
| (a) Back pain | (b) Hemophilic joint |
| (c) Osteoarthritis | (d) Sprain |

2. Heliotherapy is treatment by

- | | |
|------------------------|---------------------|
| (a) Natural sunlight | (b) Russian current |
| (c) Diadynamic current | (d) Mud packs |

3. Thermal conductivity of which of the following is least:

- | | |
|--------------|----------|
| (a) Muscle | (b) Skin |
| (c) Ligament | (d) Fat |

4. The proportion of solid wax to mineral oil in paraffin wax treatment Should be

- | | |
|---------|-------------------|
| (a) 7:1 | (b) 5:1 |
| (c) 4:1 | (d) None of above |

5. LASER promotes wound healing by:

- | | |
|------------------------------------|--------------------------------|
| (a) Cell proliferation | (b) Increase in RNA production |
| (c) Increase in collagen formation | (d) All of above |

SECTION – B

Q.1 Write in detail about indications, physiological effects and parameters of stimulation and technique for surged faradic current. (15)

OR

Q.1 Describe pain gate theory and elaborate on contraindication of TENS. (15)

Q.2 Write Short Notes (any three) (5 Marks Each) (15)

- (a) Russian current
- (b) Motor point and its importance
- (c) Principles of Reducing skin resistance
- (d) current Modulation

Q.3 Multiple Choice Question (1 Mark Each) (05)

1. In case of diffuse area of pathology, the IFT mode selected is

- (a) Scanning
 - (b) Frequency sweep mode
 - (c) Quadripolar mode
 - (d) None of above
- 2. The resting nerve is positive outside due to concentration of**
- (a) Sodium and Calcium
 - (b) Potassium
 - (c) Sodium
 - (d) Calcium
- 3. To stretch the adherent scar, the ion selected for Iontophoresis is:**
- (a) Magnesium
 - (b) Copper
 - (c) Chloride
 - (d) Zink
- 4. The types of fibers mostly activated by electrical stimulation are:**
- (a) Type-I Fibers
 - (b) Type-II a, Fibers
 - (c) Type-II b, fibers
 - (d) None of above
- 5. Therapeutically eddy current is used to**
- (a) Produce heat
 - (b) Produce Nerve stimulation
 - (c) Apply drugs in Iontophoresis
 - (d) None of Above